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Van Oler

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EXAMINER

BLACKMAN, ANTHONY J

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 01/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/724,811

Applicant(s)

OLER ET AL.

Examiner

ANTHONY J BLACKMAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. Examiner modifies previously cited references with BATES et al, US Patent No. 5,532,715 to at least suggest the means of: "...a software graphical user interface, wherein said graphical user interface comprises an interactive slide bar". Please refer to figure 4a disclosing sliding bar attributes of temperature, visual appearance and color.

### ***Claim Rejections - 35 USC § 112***

2. Claim 1 recites the limitation "the ambient temperature" in line 6 of claim 1. There is insufficient antecedent basis for this limitation in the claim. There is no reference to temperature or any range of temperatures. Claim 1 will be interpreted as best understood by examiner.

Claim 7 recites the limitation "said display screen" in b) line 5. There is insufficient antecedent basis for this limitation in the claim. There is no reference to temperature or any range of temperatures. Claim 7 will be interpreted as best understood by examiner.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 5-6, 10 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by BATES et al, US Patent No. 5,532,715.

5. As per claim 1, examiner interprets BATES et al to disclose “[I]n an electronic device having a display (figure 1, element 17) and a processor (figure 1, element 12), a method for providing contrast adjustment (from the first sampling period to the second sampling period as indicated by the region heating rate; column 2, line 54-column 3, line 3) for said display comprising:

(a) receiving a contrast setting that is user defined/scroll bar parameters (figure 4a, column 6, lines 7-50) in a software graphical user interface (figure 4b, column 6, lines 7-50), wherein said graphical user interface comprises an interactive slide bar interface (figure 4b, column 6, lines 7-50) ;

b) generating signals representative of the ambient temperature of said display over time (figure 4b, column 6, lines 7-25);

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c) sampling said signals and converting said signals into current temperature/color values (the color values are directly associated with the color values figure 4a, column 6, lines 7-50);

d) based on said contrast setting and said current temperature values contrast adjustment voltage signal for maintaining said contrast setting (figure 4b, column 6, lines 7-25) wherein said steps c) and d) are performed by said processor (column 3, line 60-column 4, line 14), and

e) automatically adjusting contrast of said display by applying said contrast adjustment voltage signal to said display (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3).

6. As per claim 2, examiner interprets BATES et al to meet limitations of claim 1, including, "...further comprising the step of f) repeating steps b) - d) (figure 4b, column 6, lines 7-50).

7. As per claim 5, examiner interprets BATES et al to meet limitations of teach a method as described in claim 1 wherein said step d) comprises the step of indexing a look-up table/scroll bar colors (figure 4b, elements of visual appearance and color name represent the lookup table) with said contrast setting (figure 4b, column 6, lines 7-25) and said current temperature values to compute said contrast adjustment voltage signal (figure 4b, column 6, lines 7-25).

8. As per claim 6, examiner interprets BATES et al to meet limitations of teach a method as described in claim 1, wherein said step d) comprises the step of inputting said contrast setting (figure 4b, column 6, lines 7-25) and said current temperature values (figure 4b, temperature elements) to a formula to compute

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said adjustment voltage signal (column 2, line 47-column 3, line 3 representative of the region heating rate).

9. As per claim 10, the means of an electronic device comprising:

A processor coupled to a bus (figure 1, element 12 is inherently connected to the system bus); a display coupled to said bus (figure 1, elements 12 and 17 inherently connected to said bus) and responsive to a contrast adjustment signal (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3), a temperature sensing circuit for generating signals representative of the ambient temperature of said display over time (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3), and wherein said processor (figure 1, element 12, column 3, lines 65-67) automatically compensates display contrast based on said ambient temperature (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3) by performing the steps of: a) receiving a contrast setting/scroll bar parameters that is user defined via a software graphical user interface (figure 4b, column 7, lines 7-50), wherein said graphical user interface comprises an interactive slide bar (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3);

b) sampling said signals and converting said signals into current temperature values (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3);

c) based on said contrast setting and said current temperature values (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3), computing a contrast adjustment voltage signal for maintaining said contrast setting; and

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d) automatically adjusting contrast of said display by applying said contrast adjustment voltage signal to said display (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3).

10. As per claim 12, examiner interprets BATES et al to meet limitations of teach a method as described in claim 10, wherein said step c) comprises the step of indexing a look-up table (figure 4b, elements of visual appearance and color name represent the lookup table) with said contrast setting and said current temperature values (figure 4b, column 6, lines 7-25) to compute said contrast adjustment voltage signal (figure 4b, column 6, lines 7-25).

11. As per claim 13 The step of inputting said contrast setting and said current temperature values to a formula to compute said contrast adjustment voltage signal (column 2, line 47-column 3, line 3 representative of the region heating rate).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 3-4, 7-8, 11, 14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over BATES et al, US Patent No. 5,532,715 in view of CATO, US Patent No. 6,433,769.

14. As per claim 3, examiner interprets BATES et al as modified to meet limitations of claim 3, further, BATES et al does not expressly teach the following limitations of claim 1, however, BATES et al teach a temperature sensing means, however, does not expressly teach claim 3 limitations (temperature sensitive diode circuit). Examiner interprets CATO to suggest , "...wherein said b) comprises using a temperature sensitive diode circuit to generate a voltage signal based on said ambient temperature (figure 3, column 3, line 44-column 4, line 38). It would have been obvious to one skilled in the art to utilize "the liquid crystal display [system] employing contrast control compensated for variations in power supply voltage and temperature (column 1, lines 5-10)" of CATO to modify graphical user interface scroll bar/slide bar positioning means associated with contrasting temperature rates and color indications of BATES et al. Because both inventions are related to similar technological environments associated with contrast control temperature sensing means (CATO –hardware means and BATES et al –software/graphical user interface means), it would have been obvious to modify BATES et al by CATO because CATO suggests the hardware (i.e., diodes and LCD means) lacking with BATES et al's software method that suggests utilization of hardware circuits to implement the software instructions.

15. As per claim 4, examiner interprets BATES et al as modified to meet limitations of claim 3, however, BATES et al does not expressly teach limitations



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of claim 4. Examiner interprets CATO to suggest, "...wherein said b) further comprises using an analog to digital converter to convert said voltage signal into a digital value (cites prior art methods ambient temperature sensing circuits-column 1, lines 28-37).

16. As per claim 7, examiner interprets BATES et al to meet limitations of claim 1, however, BATES et al does not expressly teach claim 7 features (liquid crystal display). CATO suggests, "...wherein said liquid crystal display screen comprises a liquid crystal display (LCD) display screen (figure 4, element 438).

17. As per claim 8, examiner interprets BATES et al to meet limitations of claim 1, however, does not expressly teach claim 8 features. CATO suggest utilization of a portable hand-held system (column 1, lines 50-59).

18. As per claim 11, examiner interprets BATES et al to meet limitations of claim 1, however, does not expressly teach claim 8 features. Examiner interprets CATO to suggest utilization of a temperature sensitive diode circuit for generating voltage signal based on said ambient temperature (figure 3, column 3, line 44-column 4, line 38); and an analog to digital converter to convert said voltage signal into a digital value (cites prior art methods ambient temperature sensing circuits-column 1, lines 28-37).

19. As per claim 14, examiner interprets BATES et al to meet limitations of claim 10, however, BATES et al does not meet claim 14 features. Examiner interprets CATO to suggest use of a liquid crystal display screen and display (cites prior art methods ambient temperature sensing circuits-column 1, lines 28-37) and a portable hand-held system (column 1, lines 50-59).

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20. As per claim 16, examiner interprets BATES et al to meet features of claim 16 as follows: A processor coupled to a bus (figure 1, element 12 is inherently connected to the system bus); a display coupled to said bus (figure 1, elements 12 and 17 inherently connected to said bus), and responsive to a contrast adjustment signal (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3), a temperature sensing circuit for generating signals representative of the ambient temperature of said display over time (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3), and wherein said processor (figure 1, element 12, column 3, lines 65-67) automatically compensates display contrast based on said ambient temperature (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3) by performing the steps of: a) receiving a contrast setting/scroll bar parameters that is user defined via an interactive slide bar/scroll bar of a graphical user interface displayed on said display (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3); b) sampling said signals and converting said signals into current temperature values (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3); c) based on said contrast setting and said current temperature values, computing a contrast adjustment voltage signal for maintaining said contrast setting (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3); and d) automatically adjusting contrast of said display by applying said contrast adjustment voltage signal to said display (figure 4b, column 6, lines 7-50 and column 2, line 47-column 3, line 3), however, BATES et al does not expressly teach a palm-top computer system nor a flat panel display. CATO, on the other

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hand suggests both laptop/flat panel or portable displays (column 1, lines 50-59).

It would have been obvious to one skilled in the art to utilize “the liquid crystal display [system] employing contrast control compensated for variations in power supply voltage and temperature (column 1, lines 5-10)” of CATO to modify graphical user interface scroll bar/slide bar positioning means associated with contrasting temperature rates and color indications of BATES et al. Because both inventions are related to similar technological environments associated with contrast control temperature sensing means (CATO –hardware means and BATES et al –software/graphical user interface means), it would have been obvious to modify BATES et al by CATO because CATO suggests the hardware (i.e., diodes and LCD means) lacking with BATES et al’s software method that suggests utilization of hardware circuits to implement the software instructions.

21. As per claim 17, examiner interprets BATES et al as modified to meet limitations of claim 16, however, BATES et al does not meet limitations of claim 17. Examiner interprets CATO to suggest, “...further comprising an analog to digital converter to convert said signals from said temperature sensitive diode circuit into digital values (figure 3, column 3, line 44-column 4, line 38).

22. As per claim 18, examiner interprets BATES et al as modified to meet limitations of claim 16, further, BATES et al discloses, “...wherein said c) comprises indexing a look-up table (figure 4b, elements of visual appearance and color name represent the lookup table) with said contrast setting and said current

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temperature values (figure 4b, column 6, lines 7-25) to compute said contrast adjustment voltage signal (figure 4b, column 6, lines 7-25).

23. As per claim 19, examiner interprets BATES et al as modified to meet limitations of claim 16, BATES et al also discloses , "...wherein said c) comprises inputting said contrast setting and said current temperature values to a formula to compute said contrast adjustment voltage signal (column 2, line 47-column 3, line 3 representative of the region heating rate).

24. As per claim 20, examiner interprets BATES et al as modified to meet limitations of claim 16, however, BATES et al does not expressly teach features of claim 20. Examiner interprets CATO to suggest, "...wherein said display screen is a liquid crystal display (LCD) display screen (figure 4, element 438) and wherein said electronic device comprises a portable hand-held computer system (column 1, line 50-59).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J BLACKMAN whose telephone number is 703-305-0833. The examiner can normally be reached between Monday and Friday from 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



ANTHONY J BLACKMAN  
Examiner  
Art Unit 2676

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